

California Regional Water Quality Control Board, Los Angeles Region

**Tissue, Sediment and Benthic Infauna Data  
Marina del Rey Harbor-Back Basins**

**Summary of Proposed Action**

**Proposed New Listings**

- List PCBs in sediment due to exceedance of the Effects Range-Median (ERM) and/or Probable Effects Level (PEL) guidelines.

**Proposed New Delistings**

- Delist benthic infaunal community degradation since the benthic infauna only is moderately degraded based on the benthic community index developed for the Bay Protection and Toxic Cleanup Program.
- Delist TBT in tissue since the listing was based on Elevated Data Levels (EDLs) which no longer represent valid assessment guidelines.
- Delist zinc in tissue since the listing was based on EDLs which no longer represent valid assessment guidelines.
- Delist copper in tissue since the listing was based on EDLs which no longer represent valid assessment guidelines.
- Delist **lead in tissue** since the listing was based on EDLs which no longer represent valid assessment guidelines.
- Delist DDT in sediment since sediment concentrations have dropped below sediment quality guidelines ERM and/or PEL over the past few years.

These actions all affect the aquatic life beneficial uses.

**Table 1. 303(d) Listing/TMDL Information**

<b>Waterbody Name</b>	Marina del Rey Harbor-Back Basins	<b>Pollutants/Stressors</b>	<b>Add:</b> PCBs (sediment)  <b>Delete:</b> TBT (Tissue); Zn (Tissue); Cu (Tissue); Pb (Tissue); DDT (Sediment); benthic infaunal community degradation
<b>Hydrologic Unit</b>	405.13	<b>Source(s)</b>	Historical use of pesticides and lubricants, stormwater runoff and aerial deposition from urban areas
<b>Total Waterbody Size</b>	413	<b>TMDL Priority</b>	Analytical Unit 54
<b>Size Affected</b>	121	<b>TMDL Start Date (Mo/Yr)</b>	2002
<b>Extent of Impairment</b>	Basins D, E, F	<b>TMDL End Date (Mo/Yr)</b>	2005

## Watershed Characteristics

The Santa Monica Bay Watershed Management Area (WMA), which encompasses an area of 414 square miles, is quite diverse. Its borders reach from the crest of the Santa Monica Mountains on the north and from the Ventura-Los Angeles County line to downtown Los Angeles. From there it extends south and west across the Los Angeles plain to include the area east of Ballona Creek and north of the Baldwin Hills. South of Ballona Creek the natural drainage area is a narrow strip of wetlands between Playa del Rey and Palos Verdes. The WMA includes several watersheds the two largest being Malibu Creek to the north and Ballona Creek to the south. While the Malibu Creek area contains mostly undeveloped mountain areas, large acreage residential properties and many natural stream reaches; Ballona Creek is predominantly channelized, and highly developed with both residential and commercial properties.

## Water Quality Objectives Not Attained

ERM and/or PEL

EDLs have been determined to be an insufficient basis for impairment determination.

## Beneficial Uses Affected

Aquatic Life

## Data Assessment

Sediment toxicity (93, 94, 97)

Sediment Chemistry (93, 94, 96, 97): copper, lead, zinc, chlordane, DDT, PCB

Sediment Chemistry (95-98): copper, lead, zinc

Tissue (93, 95): chlordane, PCB

**Table 2. Summary of Tissue and Sediment Data for Marina Del Rey Harbor-Back Basins**

Dates of Sampling	6/22/93; 1/14/93; 2/15/94; 6/28/95; 6/19/96; October 1996; 2/5/97; October 1997; October 1998; September 1999; October 2000
Number of Samples (n)	1993: 1 (sediment), 1 (fish tissue); 1994: 3 (sediment); 1995: 3 (fish tissue); 1996: 5 (sediment); 1997: 9 (sediment); 1998: 4 (sediment); 1999: 4 (sediment); 2000: 4 (sediment)
Minimum Data Value	Copper (sed): 108 ppm; Lead (sed): 51 ppm Zinc (sed): 157 ppm; Total chlordane (sed): nd Total PCB (sed): nd; Total chlordane (tis): nd; Total PCB (tis): nd
Maximum Data Value	Copper (sed): 420 ppm; Lead (sed): 292 ppm; Zinc (sed): 520 ppm; Total chlordane (sed): 24.9 ppb; Total PCB (sed): 391.5 ppb; Total chlordane (tis): 128 ppb; Total PCB (tis): 490 ppb
Median Data Value	
Arithmetic Mean Value	
Standard Deviation	
Number (Percent) above Objective	Sediment toxicity: 6 (86 %); Copper (sed): 22 (96 %); Lead (sed): 12 (52 %); Zinc (sed): 18 (78 %); Chlordane (sed): 7 (30 %); PCB (sed): 7 (30 %); Chlordane (tis): 2 (50 %); PCB (tis) 3 (75 %)

This table may summarize additional data not relevant to this factsheet that supports a continued listing for this waterbody.

## Potential Sources

Historical use of pesticides and lubricants, stormwater runoff and aerial deposition from urban areas.

**References**

Toxic Substances Monitoring Program database

Bay Protection and Toxic Cleanup Program database

Marina Del Rey Monitoring Program, Los Angeles County Department of Beaches and Harbors